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APPLICATION NO.	F	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/769,514	01/30/2004		Anthony Bernard Schryvers	028722-376	8013
21839	7590	03/08/2006		EXAMINER	
BUCHANAN INGERSOLL PC				BASKAR, PADMAVATHI	
•		IS, DOANE, SWECK	KER & MATHIS)	ADTIDUT	DADED MINORE
POST OFFICE BOX 1404				ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22313-1404				1645	

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)						
Office Action Summary	10/769,514	SCHRYVERS, ANTHONY BERNARD						
Office Action Summary	Examiner	Art Unit						
	Padmavathi v. Baskar	1645						
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1) Responsive to communication(s) filed on	_·							
2a) This action is <b>FINAL</b> . 2b) ∑ This	Γhis action is <b>FINAL</b> . 2b)⊠ This action is non-final.							
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims								
4) Claim(s) 1-27 is/are pending in the application.								
4a) Of the above claim(s) is/are withdrawn from consideration.								
5) Claim(s) is/are allowed.								
6) Claim(s) is/are rejected.								
	7) Claim(s) is/are objected to.							
8) Claim(s) 1-27 are subject to restriction and/or election requirement.								
Application Papers								
9) The specification is objected to by the Examine	r.							
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).								
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority under 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:								
1. Certified copies of the priority documents have been received.								
2. Certified copies of the priority documents have been received in Application No								
3. Copies of the certified copies of the priority documents have been received in this National Stage								
application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.								
* See the attached detailed Office action for a list	of the certified copies not receive	ea.						
Attachment(s)	—							
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date.								
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  5) Notice of Informal Patent Application (PTO-152)							
Paper No(s)/Mail Date 6)  Other:								

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## **Election/Restrictions**

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - Claims 1-5, 6-7 and 8-14 (in part), drawn to a molecule, polypeptide and a vaccine classified in class 435, 424 subclass 69.7, 184.1 respectively
     (Further restriction to one SOF/SEQ.ID.NO is required, see Para # 4)
  - II. Claims 15-21 (in part), drawn to an antibody classified in class 530, subclass 387.1.
    - (Further restriction to one SOF/SEQ.ID.NO is required, see Para # 4)
  - III. Claims 22-23 (in part), drawn to a method of identifying a transferring binding determinant vivo antibody response using composition or fusion protein or a cock tail comprising S. pyogenes serum opacity factor polypeptides classified in class 435, subclass 7.1
    - (Further restriction to one SOF/SEQ.ID.NO is required, see Para # 4)
  - IV. Claims 24, 26 and 27(in part),drawn to a method of treating using a molecule classified in class 424, subclass 185.1
     (Further restriction to one SOF/SEQ.ID.NO is required, see Para # 4)
  - V. Claims 25, 26 and 27(in part) ,drawn to a method of treating using antibodies, classified in class 424, subclass 130.1
    (Further restriction to one SOF/SEQ.ID.NO is required, see Para # 4)
- The inventions are distinct, each from the other because of the following reasons...
   Inventions I-II are patentably distinct products.

The polypeptides of group I and antibodies of group II are patentably distinct as polypeptides, which are composed of amino acids are structurally distinct molecules from antibody of group II, encompasses antibodies including IgG which comprises 2 heavy and 2 light chains containing

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constant and variable regions, and including framework regions which act as a scaffold for the 6 complementary determining regions (CDRs) that function to bind an epitope. Thus the polypeptide of group I and the antibody of group II are structurally distinct molecules; any relationship between a polypeptide of group I and an antibody of group II is dependent upon the correlation between the scope of the polypeptides that the antibody binds and the scope of the antibodies that would be generated upon immunization with the polypeptide.

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3. Inventions III/IV/V are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). The instant specification does not disclose that these methods would be used together. The method of identifying and the method of treating a mammal using polypeptide or antibodies are unrelated as they comprise distinct steps and utilize different products which demonstrates that each method has a different mode of operation. Each invention performs this function using a structurally and functionally divergent material. Moreover, the methodology and materials necessary for identifying binding protein differ significantly than treating a mammal because identifying a binding protein requires polypeptides, antibodies, enzymes and means of identifying complex, however treatment of an infection requires identifying an individual with infection and administering antibodies or polypeptide. Therefore, each method is divergent in materials and steps. For these reasons the Inventions III, IV, and V are patentably distinct.

## **DISTINCT INVENTIONS**

4. For each group of inventions I-V above, restriction to one of the following one SEQ ID NO is also required. Therefore, election is required of one of inventions I-V and one SEQ ID NO.

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SEQ.ID.NOS 1-14 and 17, 20, 25, 28, 30, 34, 36, 39 and 48-86 etc represent structurally different polypeptides. Therefore, where structural identity is required, such as for expression, the sequences have different effects. Thus, each sequence is patentably distinct and unique Applicant is required under Restriction is required under 35 U.S.C. 121 to elect a single disclosed SEQ.ID.NO from any group elected.

- 5. Inventions I and III/IV are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the polypeptide can be used to catalyze an enzymatic reaction as opposed to its use in a method of identifying transferring binding protein or method of treating an infection.
- 6. Inventions II and III /V are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the antibodies can be used to purify antigens in an immunochromatograpy opposed to its use in a method of identifying transferring binding protein or method of treating an infection.
- 7. Because these inventions are distinct for the reasons given above, have acquired a separate status in the art as shown by their different classification, the literature and sequence searches required for each of the Groups are not required for another of the Groups, restriction for examination purposes as indicated is proper.

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8. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

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- 9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).
- 10. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.
- 11. In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on

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Treatment of Product and Process Claims in light of *In re Ochiai, In re Brouwer* and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the product claims or to otherwise include the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder.**Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

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- 12. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143). Applicant is required, in reply to this action, to elect a group and one sequence and identify the SEQ.ID.NO to which the claims shall be restricted. The reply must also identify the claims readable on the elected invention, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.
- 13. Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.
- 14. Concerning the burden of search, classification of subject matter is merely one indication of the burdensome nature of the search involved. The DNA database searches required by each of the sequences and the literature searches for each of the sequences, both of which are particularly relevant in this art, are not co-extensive and are much more important in evaluating

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the burden of search. Further, it is doubted that applicants would readily accept the rejection of one sequence by the application of art teaching another sequence. Clearly different searches and issues are involved in the examination of each group.

- 15. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventor ship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventor ship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(l).
- 16. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Padma Baskar Ph.D., whose telephone number is ((571) 272-0853. A message may be left on the Examiner's voice mail system. The Examiner can normally be reached on Monday to Friday from 6.30 a.m. to 4.00 p.m. except First Friday of each bi-week. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynette Smith can be reached on (571) 272-0864. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1600.
- 17. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PMR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PMR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PMR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Padma Baskar Ph.D.

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